

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number
WO 2005/074010 A3

(51) International Patent Classification:
H05B 41/00 (2006.01) **H01J 61/82** (2006.01)

(21) International Application Number:
PCT/IB2005/050209

(22) International Filing Date: 18 January 2005 (18.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04100287.4 28 January 2004 (28.01.2004) EP
04100641.2 18 February 2004 (18.02.2004) EP

(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COUWENBERG, Winston, D.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **KELJSER, Robertus, A., J.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **CLAASSENS, Jacobus, M., M.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **SIMPELAAR, Bennie, I., P.** [NL/BE]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agents: **DUSSELDORP, Jan, C.** et al.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

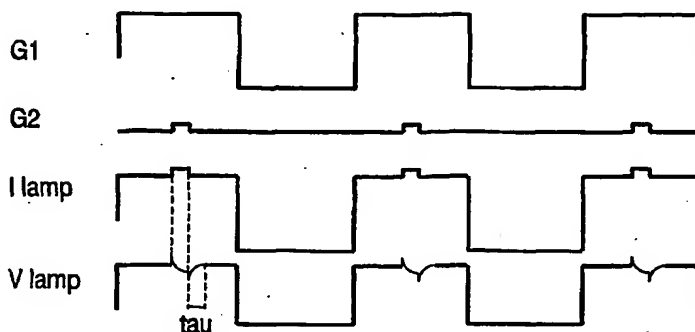
Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
13 July 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND BALLAST FOR DRIVING A HIGH-PRESSURE GAS DISCHARGE LAMP



steady-state waveform of the current signal through the lamp (10), and generating a signal indicating the lamp type, wherein said current step is obtained by sending a current pulse (G2) which is superimposed on said steady-state current signal (G1) through the lamp (11).

(57) Abstract: Method of driving a high-pressure gas discharge lamp (11) during its steady-state operation, wherein a steady-state current signal is sent through the lamp (11) for maintaining a discharge arc in the lamp (11), comprising the step (G1) of comparing the lamp conductivity response to a current step in said current signal with reference parameters; and in response to said comparison at least one of the following steps: stopping the current supply to the lamp (11), generating a signal indicating the end-of-life status of the lamp (11), changing the steady-state current through the lamp (11), changing the

WO 2005/074010 A3